

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKÉWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for the preparation of a microencapsulated composition containing at least one lipophilic compounds compound comprising ~~of the~~ following steps:

(i) ~~Particle~~ particle size reduction of the lipophilic compound, in the presence of a surface active agent, to provide a first composition;

(ii) ~~Preparing~~ providing a solution of alkali metal alginate;

(iii) ~~Combining~~ combining said first composition and the alkali metal alginate solution ~~solutions of step (i) and step (ii)~~ to provide a second composition;

(iv) ~~Adding~~ adding dropwise the second composition ~~solution obtained from stage (iii)~~ to a solution containing Ca^{2+} , thereby obtaining beadlets, and removing the formed beadlets from said solution;

(v) ~~Rinsing~~ rinsing the beadlets with an acidic solution and drying said beadlets to obtain dried beadlets;
and

(vi) ~~Coating~~ coating the dried beadlets with a
coating material obtained from step (v) to obtain the
microcapsules containing said lipophilic compound.

2. (Original) A process according to claim 1,
wherein the particle size of the lipophilic compound is
reduced to a particle size not greater than 20 μm .

3. (Original) A process according to claim 2
wherein the particle size of the lipophilic compound is
reduced to a particle size not greater than 10 μm .

4. (Original) A process according to claim 1,
wherein the alkali metal alginate is sodium or potassium
alginate.

5. (Original) A process according to claim 1
wherein a filler is added to stage (i).

6. (Currently Amended) A process according to
claim 1, wherein the lipophilic compound is selected from
~~among a~~ the group comprising consisting of lycopene, beta and
alpha-carotene, lutein, astaxanthin, zeaxanthin, vitamin A,
vitamin E, vitamin D, omega 3 oils, omega 6 oils and mixtures
thereof

7. (Original) A process according to claim 1 wherein a filler is added to stage (ii).

8. (Original) A process according to claim 1, wherein the lipophilic compound containing alginate beadlets are in the size range of 100 to 425 μm .

9. (Currently Amended) A process according to claim 1 wherein the acidic solution is an acidic aqueous solution of ~~comprising of~~ an acid selected from ~~among a the~~ group ~~comprising~~ consisting of citric, aspartic, acetic, ascorbic, lactic, phosphoric ~~or~~ and hydrochloric ~~acid~~ acids.

10. (Currently Amended) A process according to claim 1 wherein the coating material applied in stage (vi) is selected from ~~among a the~~ group ~~comprising~~ consisting of cellulose derivatives, waxes, fats, proteins and polysaccharides.

11. (Original) A process according to claim 10 wherein the cellulose derivative is hydroxypropylcellulose.

12. (Currently Amended) A process according to claim 1 wherein size reduction of ~~step~~ stage (i) is carried out in a liquid medium wherein said liquid medium is water or a water miscible liquid.

13. (Original) A microencapsulated composition comprising of one or more lipophilic compounds enveloped by a surfactant agent, encapsulated in an alginate matrix and further coated with an outer coating, wherein the particle size of the lipophilic substance is not greater than 20 μm .

14. (Currently Amended) A composition according to claim 13 wherein the lipophilic compound is selected from the ~~among a group consisting comprising~~ of lycopene, beta and alpha-carotene, lutein, astaxanthin, zeaxanthin, vitamin A, vitamin E, vitamin D, omega 3 oils, omega 6 oils and mixtures thereof.

15. (Original) A composition according to claim 13 wherein the particle size of the lipophilic compound is not greater than 10 μm .

16. (Original) A composition according to claim 15 wherein the particle size not greater than 5 μm .

17. (Original) A composition according to claim 13 wherein the size of the microcapsules is in the range of 50 μm to 950 μm .

18. (Original) A composition according to claim 17 wherein the size of the microcapsules is in the range of 100 μm to 450 μm .

19. (Original) A composition according to claim 13 comprising 0.1% to 40% of a lipophilic compound or mixtures thereof.

20. (Currently Amended) A composition according to claim 13 wherein the outer coating is of a material selected from the among a group consisting comprising of cellulose derivatives, waxes, fats, proteins and polysaccharides.

21. (Currently Amended) A composition according to claim 19 wherein the outer coating is hydroxypropylcellulose.

22. (Original) A composition according to claim 13 wherein said composition is tablet grade.

23. (Original) A method for incorporating lipophilic compounds in food stuff comprising of encapsulating the lipophilic compound according to the process of claim 1 and adding the encapsulated composition to food stuff.

24. (Original) A method for masking the flavor and/or smell of lipophilic compounds comprising encapsulating the lipophilic compound according to the process of claim 1.

25. (New) A process for preparing a microencapsulated composition containing at least one liquid lipophilic compound, comprising :

(i) particle size reduction of the liquid lipophilic compound, in the presence of a surface active agent, and optimally a filler in a liquid medium of (1) water, (2) a water-miscible liquid, or (3) a mixture of water and a water-miscible liquid, thereby providing a suspension or emulsion wherein the particle size of the lipophilic compound is not greater than 10 μm ;

(ii) providing a solution of an alkali metal alginate optionally containing a filler;

(iii) combining said suspension or emulsion and the solution of alkali metal alginate to provide a second suspension or emulsion;

(iv) adding dropwise the second suspension or emulsion to a solution containing Ca^{2+} thereby obtaining beadlets in liquid, said beadlets having a second coating thereon, and removing said beadlets from said liquid;

(v) rinsing said beadlets with an acidic solution and drying said beadlets to obtain dried beadlets;

(vi) coating the dried beadlets with a coating material to provide a third coating, thereby obtaining microcapsules of 100-450 μm in particle size containing said lipophilic compound, wherein said microcapsules comprise said second and third coatings.